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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,929	08/25/2003	Paul K. Piontkowski		1610

7590 07/06/2006  
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EXAMINER

NGUYEN, THONG Q

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 07/06/2006

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Application Number: 10/646,929  
Filing Date: August 25, 2003  
Appellant(s): PIONTKOWSKI, PAUL K.

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Carroll Dority  
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 1/18/2006 appealing from the Office action mailed 9/12/2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4,396,260	TAKIZAWA et al	8-1983
5,841,509	HAROONI et al	11-1998
5,442,489	YAMAMOTO et al	8-1995

5,420,716	FUKAYA	5-1995
3,434,772	FOGLE	3-1969
4,175,826	BLAHA et al	11-1979

**(9) Grounds of Rejection**

The following grounds of rejection are applicable to the appealed claims:

- A) Claims 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takizawa et al (U.S. Patent No. 4,396,260) in view of Yamamoto et al (U.S. Patent No. 5,442,489) and Harooni et al (U.S. Patent No. 5,841,509).

Takizawa et al disclose a stereomicroscope having an illumination system. The stereomicroscope as described in columns 2-3 and shown in figures 1-3 comprises a hollow elongated tube (20) having two ends. An objective system having a lens frame (23) supporting an objective lens (11) attached to the tube at one end thereof. A set of ocular systems each has a prism system (14a or 14b) and an ocular lens system (16a or 16b) attached to the other end of the tube. A varying magnification mechanism disposed between the objective lens and a prism system (17a or 17b) for splitting light. The mechanism comprises a rotary member (21) rotated about an axis perpendicular to the light path wherein the rotary member comprises two set of bores in which a first set of bores supports a set of lens elements (12a) and another set of bores supporting another set of lens elements (12b). See column 3. When a rotation of the rotary member is made then either the set of lens elements (12a or 12b) or a set of apertures (22a or 22b) is inserted into the light path for the purpose of selection a particular

magnification level to the image/light passing therethrough. It is also noted that the use of a light source located near the objective section of the stereomicroscope is also provided by Takizawa et al as can be seen in column 2 and fig. 1.

Regarding to the first and second optical paths, it is noted that a first optical path from an object to be viewed passes through the objective lens (11), the magnification lens elements (12a), the prisms (17a, 14a) and the ocular lens (16a) while a second optical path from an object to be viewed passes through the objective lens (11), the magnification lens elements (12b), the prisms (17b, 14b) and the ocular lens (16b). The first and second optical paths are in the same plane. As a result, the stereomicroscope having an illuminating system and a variable magnification system as provided by Takizawa et al meets all of the features of the inventive device except the feature related to the light source used in the illumination system and their arrangement with respect to the hollow elongated tube as claimed.

Regarding to the use of light emitting diode for providing light as claimed, such a feature is merely that of a preferred embodiment and there is not any criticality to the invention. The support for that conclusion is found in the present specification in section [0011] in which applicant has taught that other light source may be used in place of the light emitting diode. Further, the use of light emitting diode in an illuminating device is known to one skilled in the art as can be seen in the ophthalmoscope provided by Harooni et al. In particular, Harooni et al disclose

an ophthalmoscope having an illuminating system and an observation system.

The illuminating system as described in columns 3-5 and shown in figure 2 comprises a light emitting diode (145) having a reflector (185) disposed behind for the purpose of increasing the light amount of the diode toward the front side and a filter system (155) disposed in the front side of the diode (145). While Harooni et al do not clearly state that the filter is pivoting; however, it would have been obvious to one skilled in the art to use a mechanism for pivoting the filter in front of the diode for the purpose of controlling the kind of light/wavelength from the diode to the object to be illuminated. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the illuminating system provided by Takizawa et al by using an illuminating system having a diode, a reflector and a filter as suggested by Harooni et al and pivoting the filter for the purpose of controlling the amount of light and the type of light/wavelength to illuminate an object.

Regarding to the arrangement of the light source in the tube as recited in the present claim 12, such an arrangement is also known to one skilled in the art as can be seen in the magnifying observation system provided by Yamamoto et al. In particular, in columns 6-8 and figures 1-3, Yamamoto et al disclose an illuminating system for an optical device and teach that the illumination system having light sources (23) and optical elements (22, 27, 35, 36) is arranged inside a hollow elongated tube (5). Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the combined product

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provided by Takizawa et al and Harooni et al by rearranging the illumination system having light emitting diodes and other optical elements inside the elongated tube as suggested by Yamamoto et al for the purpose of obtaining a more compact configuration for the stereomicroscope.

B) Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takizawa et al, Harooni et al and Yamamoto et al as applied to claim 12 above and further in view of Fogle (U.S. Patent No. 3,434,772).

The combined product provided by Takizawa et al, Harooni et al and Yamamoto et al does not disclose that the optical elements are mounted on a base section located inside an elongated body defined by shells fastened together as claimed. However, such use of shells fastened together for defining an open which is in turn supported a mount having plural optical elements mounted therein is known to one skilled in the art. An example of use a mount supporting a plurality of optical elements which mount is located inside an open defined by shells fastened together is disclosed in columns 2-4 and shown in figures 1-8. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the combined product provided by Takizawa et al, Harooni et al and Yamamoto et al by mounting optical elements on a mounting section and then disposed the mounting section inside an open defined by shells fastened together as suggested by Fogle for the purpose of providing an easier way to install and remove the optical elements.

**(10) Response to Argument**

A) Regarding to the rejection of claims 12 and 15 under 35 U.S.C. 103(a) as being unpatentable over Takizawa et al (U.S. Patent No. 4,396,260) in view of Yamamoto et al (U.S. Patent No. 5,442,489) and Harooni et al (U.S. Patent No. 5,841,509), appellant's arguments as provided in the Brief, pages 8-16, have been fully considered but they are not persuasive.

First, regarding to the appellant's arguments that the art of Takizawa et al does not disclose a lens magnification changer having two series of bores wherein a lens assembly is located in each bore of the two series of bores, see Brief, page 8, the Examiner respectfully disagrees with the appellant's opinions and respectfully invited the appellant to review the art of Takizawa et al in columns 2-3 and figs. 1-3. In particular, Takizawa et al disclose a lens magnification changer (21) disposed between the objective lens assembly (11) and the optics (13a, b; 14a, b and 16a, b). The lens magnification changer comprises a first and second sections each discloses in an optical path from the objective lens assembly to the correspond eyepiece. In particular, in the light path from the objective lens assembly to the eyepiece (16a), the first section has two set of extending diametrically apertures which one set of apertures contains lens assembly (12a) and the other set of apertures (22a) does not contain any lens. The light passing through objective lens assembly (11) will pass through the lens assembly (12a) before pass through the lens (13a), the prism (14a) and come to the eyepiece (16a) when the set of apertures contained lens assembly is place in operation. In



the similar structure, in the light path from the objective lens assembly to the eyepiece (16b), the second section has two set of extending diametrically apertures in which one set of apertures contains lens assembly (12b) and the other set of apertures (22b) does not contain any lens. The light passing through objective lens assembly (11) will pass through the lens assembly (12b) before pass through the lens (13b), the prism (14b) and come to the eyepiece (16b) when the set of apertures contained lens assembly is place in operation. The bores extending diametrically there-through in which the lens assembly (12a) occupied are the first series of bores, and the bores extending diametrically there-through in which the lens assembly (12b) occupied are the second series of bores. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Second, regarding to the appellant's arguments related to the illuminating system, see Brief, page 9, the appellant's arguments have been fully considered but they are not persuasive.

In response to appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642

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F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Appellant should note that the art of Harooni et al and the art of Yamamoto et al are used as secondary references with the primary reference in the rejection of the claim because the art of Harooni et al discloses the use of an illuminating system having a light-emitting-diode, hereafter, Led, a reflector disposed after the Led and a filter disposed in front of the Led, and the art of Yamamoto et al disclose the arrangement of an illuminating system inside and in the object section of a housing. Regarding to the appellant's argument that Yamamoto et al does not teach to locate the illumination system adjacent to an objective lens located in an end of an elongated housing, the Examiner respectfully disagrees because one skilled in the art will dispose the illuminating system of the combined product as provided by Takizawa et al and Harooni et al at the location near the objective lens assembly (11) in the stereomicroscope of Takizawa et al as suggested by Yamamoto et al for the purpose of obtaining a more compact configuration for the stereomicroscope.

Third, regarding to the appellant's arguments related to the optical features of the light emitting diodes as provided in the brief, pages 9-10, the arguments have been considered but they are not persuasive for the following reasons.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant

relies (i.e., structure of the Led, the color, the light intensity...) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is noted that the Office action has disclosed that the stereomicroscope of Takizawa et al comprises an illuminating system having a light source, see Takizawa et al Patent, column 2, fig. 1 and optical element labeled as "3". While Takizawa et al do not clearly disclose the type of light source; however, the use of an illuminating system having a Led, a reflector and a filter as claimed is merely that of a preferred embodiment and no criticality has been disclosed. The support for that conclusion is found in the present specification in section [0011] in which applicant has taught that other light source may be used in place of the light emitting diode. In other words, in section [0011], applicant has disclosed: "Located at one end of the housing 26 and adjacent the objective lens 32 is an LED light source 43 which may be either one or a plurality of LEDs. However, other light sources may be used".

Further, the use of light emitting diode in an illuminating device is known to one skilled in the art as can be seen in the ophthalmoscope provided by Harooni et al. In particular, Harooni et al disclose an ophthalmoscope having an illuminating system and an observation system. The illuminating system as described in columns 3-5 and shown in figure 2 comprises a light emitting diode (145) having a reflector (185) disposed behind for the purpose of increasing the light amount

of the diode toward the front side and a filter system (155) disposed in the front side of the diode (145).

Fourth, regarding to the appellant's arguments related to the position of the Led with respect to the objective lens, appellant's arguments provided in the brief, pages 11-12, have been fully considered but they are not persuasive because the combined product provided by Takizawa et al, Harooni et al and Yamamoto et al includes an illuminating system disposed at a position adjacent to the objective lens located on one end of the housing supporting all optical elements. In other words, one skilled in the art will position the illuminating system dispose the illuminating system of the combined product having a Led, a reflector and a filter as provided by Takizawa et al and Harooni et al at the location adjacent to the objective lens assembly (11) as suggested by Yamamoto et al for the purpose of obtaining a more compact configuration for the stereomicroscope and improving the illumination distribution on an object to be illuminated.

Fifth, regarding to the rejection of claim 15, appellant's arguments as provided in the Brief, page 13, have been fully considered but they are not persuasive, Appellant has agued that Harooni et al do not disclose the structure of the illuminating system as claimed. The Examiner respectfully disagrees.

Appellant should note that the art of Harooni et al is used as a secondary references with the primary reference, the art of Takizawa et al, in the rejection of

the claim because the art of Harooni et al discloses the use of an illuminating system having a light-emitting-diode, a reflector and a filter. As stated by Harooni et al in columns 3-5 and shown in figure 2, the illuminating system comprises a light emitting diode (145) having a reflector (185) disposed behind for the purpose of increasing the light amount of the diode toward the front side and a filter system (155) disposed in the front side of the diode (145). While Harooni et al do not clearly state that the filter is pivoting; however, it would have been obvious to one skilled in the art to use a mechanism for pivoting the filter in front of the diode for the purpose of controlling the kind of light/wavelength from the diode to the object to be illuminated. Regarding to the microscope having an elongated housing supporting an objective lens at one end, an eyepiece at the other end and a lens magnification changer in the space between the objective and the eyepiece, and an illuminating system having light source, such a structure having the mentioned optics is disclosed in the primary reference, Takizawa et al. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the illuminating system provided by Takizawa et al by using an illuminating system having a diode, a reflector and a filter as suggested by Harooni et al and pivoting the filter for the purpose of controlling the amount of light and the type of light/wavelength to illuminate an object.

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B) Regarding to the rejection of claim 24 under 35 U.S.C. 103(a) as being unpatentable over Takizawa et al (U.S. Patent No. 4,396,260) in view of Yamamoto et al (U.S. Patent No. 5,442,489) and Harooni et al (U.S. Patent No. 5,841,509), appellant's arguments as provided in the Brief, pages 14-15, have been fully considered and found persuasive. Thus, the rejection of claim 24 is now withdrawn.

The device of claim 24 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

C) Regarding to the rejections of claim 16 under 35 U.S.C. 103(a) as being unpatentable over Takizawa et al (U.S. Patent No. 4,396,260) in view of Yamamoto et al (U.S. Patent No. 5,442,489) and Harooni et al (U.S. Patent No. 5,841,509) and further in view of Blaha et al (U.S. Patent No. 4,175,826), appellant's arguments as provided in the Brief, pages 14-16, have been fully considered and found persuasive. Thus, the rejection to claim 16 is withdrawn.

The device of claim 16 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

D) Regarding to the rejections of claim 17 under 35 U.S.C. 103(a) as being unpatentable over Takizawa et al (U.S. Patent No. 4,396,260) in view of Yamamoto et al (U.S. Patent No. 5,442,489) and Harooni et al (U.S. Patent No. 5,841,509) and further in view of Fukaya (U.S. Patent No. 5,420,716), appellant's arguments as

provided in the Brief, pages 16-17, have been fully considered and found persuasive.

Thus, the rejection to claim 17 is withdrawn.

The device of claim 17 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

E) Regarding to the rejection of claims 22-23 under 35 U.S.C. 103(a) as being unpatentable over Takizawa et al (U.S. Patent No. 4,396,260) in view of Yamamoto et al (U.S. Patent No. 5,442,489) and Harooni et al (U.S. Patent No. 5,841,509) and further in view of Fogle (U.S. Patent No. 3,434,772), appellant's arguments as provided in the Brief, pages 17-18, have been fully considered but they are not persuasive.

Appellant has argued that the Examiner has not provided how the microscope of Takizawa et al could be modified using the teachings provided by Fogle to include the limitations of claim 22. The Examiner offers the following explanations.

It is noted that the combined product provided by Takizawa et al, Harooni et al and Yamamoto et al does not disclose that the optical elements are mounted on a base section located inside an elongated body defined by shells fastened together as claimed. However, in the rejection as set forth in the Final Office action, the Examiner has stated that an arrangement of optical elements inside a housing which has shells fastened together for defining an open which is in turn supported a mount having plural optical elements mounted is disclosed in the art of Fogle as described in columns 2-4 and shown in figs. 1-8. In particular, the

system as provided by Fogle comprises the following features: A frame (J) for supporting an optical lens (4) which functions as a magnifying lens, a prism system (A1 or A2) and an eyepiece (2), see column 2 and figs 5-6; and a mounting system having disc-shaped elements (13, 14), nut (21), pin (22) for supporting and rotating the lens element (4) wherein the disc-shaped element is connected at its base to a running nut (21) supporting a pivotal pin (22), see column 3 and figs. 4-7. The mounting system is disposed inside a housing having two shells (H1) and (H2) which is movable relatively to each other, see column 2 and figs. 2-3. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the combined product having a magnification lens system, a prism system, and an eyepiece system by installing the optical elements on the base section of an internal mount such as a frame and disposed the internal mount inside a housing having shells fastened together as suggested by Fogle for the purpose of providing an easier way to install and remove the optical elements.


**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.



For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Thong Nguyen

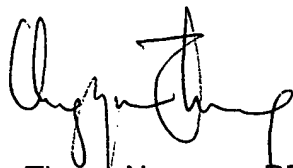
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